At page 10, please delete the following paragraphs which were added by the Amendment dated June 22, 2001:

Please delete the paragraph beginning with the sentence "In Figure 3, several of the elements are the same as in Figure 1."

Please delete the paragraph beginning with the sentence "In Figure 4, several of the elements are the same as in Figure 1."

Please delete the paragraph beginning with the sentence "In Figure 5, several of the elements are the same as in Figure 1."

Please delete the paragraph beginning with the sentence "In Figure 7, several of the elements are the same as in Figure 1."

Please delete the paragraph beginning at page 17, line 29 and ending at page 18 line 22. Please substitute the following new paragraphs to read as follows.

B1

-- FIG. 3 is a schematic cross-sectional view illustrating the hydrogen purifying apparatus in Embodiment 1-2. In Figure 3, several of the reference numerals refer to items that are also shown in Figure 1, but different reference numerals are used in Figure 1. Reference numeral 13 in Figure 3 and reference numeral 3 in Figure 1 both refer to the air supply duct. Reference numeral 14 in Figure 3 and reference numeral 4 in Figure 1 both refer to the air flow rate control valve. Reference Numeral 15 in Figure 3 and reference numeral 5 in Figure 1 both refer to the cooled water supply duct. Reference Numeral 16 in Figure 3 and reference numeral 6 in Figure 1 both refer to the cooled water volume control valve. Reference numeral 19 and numeral 10 both refer to the reformed gas outlet. A provision of the heat exchange fin 20 close to the side wall around the downstream side of the catalyst layer 11 helps to heat the downstream

side of the catalyst layer 11. Such structure also facilitates cooling the reformed gas by a heat exchanger 17. Moreover, since the reformed gas flow pathway thermally insulates the catalyst layer 11, the temperature distribution in the center and the periphery of the catalyst layer 11 becomes homogeneous, thereby enabling efficient oxidation of CO. Due to the structure of the apparatus such that the reformed gas passes through the catalyst layer 11 in an opposing direction of stream to that before passing through the heat exchanger 17, the reformed gas at elevated temperature can exchange heat with the downstream side of the catalyst layer 11 and is cooled. Because the reformed gas thus cooled then passes along the upstream side of the catalyst layer 11, the temperature of the catalyst layer 11 can be lowered at the upstream side and elevated at the downstream side. As a result, the temperature distribution can be optimized in response to selective oxidation of CO by the catalyst.--.

B1

Please delete the paragraph beginning at page 19, line 17 and ending at page 20 line 3. Please substitute the following new paragraphs to read as follows.

--FIG. 4 is a schematic cross-sectional view illustrating the hydrogen purifying apparatus in Embodiment 1-3. In Figure 4, several of the reference numerals refer to items that are also shown in Figure 1, but different reference numerals are used in Figure 1. Reference numeral 23 in Figure 4 and reference numeral 4 in Figure 1 both refer to the air flow rate control valve. Reference numeral 25 in Figure 4 and reference numeral 5 in Figure 1 both refer to the cooled water supply duct. Reference numeral 26 in Figure 4 and reference numeral 6 in Figure 1 both refer to the cooled water volume control valve. Reference numeral 29 in Figure 4 and reference numeral 10 in Figure 1 both refer to the reformed gas outlet. A provision of the heat exchange fin 30 on the wall of the reformed gas flow pathway neighboring the downstream side

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of the catalyst layer 21 helps to heat the downstream side of the catalyst layer 21 while cooling the reformed gas. Such structure also facilitates cooling by a heat exchanger 27. In the event that the flow rate of the reformed gas is increased, cooling only by the heat exchanger proves insufficient occasionally when the temperature is elevated greatly due to oxidation heat by CO and hydrogen. However, the structure of the apparatus of this embodiment where heat is radiated from the periphery of the reaction chamber 28 enables to minimize elevation of the temperature of the catalyst layer 21. Therefore, the apparatus can cope with any increases in load due to increased flow rate of the reformed gas.-].

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Please delete the paragraph beginning at page 20, line 18 and ending at page 20 line 29. Please substitute the following new paragraphs to read as follows.

[-FIG. 5 is a schematic cross-sectional view illustrating the hydrogen purifying apparatus in Embodiment 1-4. In Figure 5, several of the reference numerals refer to items that are also shown in Figure 1, but different reference numerals are used in Figure 1. Reference numeral 34 in Figure 5 and reference numeral 3 in Figure 1 both refer to the air supply duct. Reference numeral 35 in Figure 5 and reference numeral 4 in Figure 1 both refer to the air flow rate control valve. Reference numeral 36 in Figure 5 and reference numeral 5 in Figure 1 both refer to the cooled water supply duct. Reference numeral 37 in Figure 5 and reference numeral 6 in Figure 1 both refer to the cooled water volume control valve. Reference numeral 41 in Figure 5 and reference numeral 10 in Figure 1 both refer to the reformed gas outlet. The operable temperature range of the catalyst selectively oxidizing CO varies depending on the species of rare metal contained in the catalyst, type of carrier and the like. In the present embodiment, for the first catalyst layer 31, a catalyst operable at high temperatures is used and for the second

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catalyst layer 32, a catalyst operable at low temperatures. More specifically, a platinum-carrying zeolite was used for the first catalyst layer 31 and a platinum-carrying alumina for the second catalyst layer 32.--.

Please delete the paragraph beginning at page 23, line 2 and ending at page 23 line 16. Please substitute the following new paragraphs to read as follows.

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--FIG. 7 is a schematic cross-sectional view illustrating the hydrogen purifying apparatus in Embodiment 1-5. In Figure 7, several of the reference numerals refer to items that are also shown in Figure 1, but different reference numerals are used in Figure 1. Reference numeral 58 in Figure 7 and reference numeral 5 in Figure 1 both refer the cooled water supply duct. Reference numeral 59 in Figure 7 and reference numeral 6 in Figure 1 both refer to the cooled water volume control valve. Reference numeral 60 in Figure 7 and reference numeral 7 in Figure 1 both refer to the heat exchanger. In the present embodiment, for the first catalyst layer 51, a catalyst operable at low temperatures is used and for the second catalyst layer 52, a catalyst operable at high temperatures is used. When the first catalyst layer 51 is increased in temperature greatly due to reaction between CO and air, the catalyst loses the ability to selectively oxidize CO occasionally. Therefore, air supply from a first air supply duct 54 to the first catalyst layer 51 is reduced by providing the second catalyst layer 52 and the second air supply duct 55 in order to suppress temperature rises at the first catalyst layer 51. As a result, CO can be removed efficiently.--

Please delete the paragraph beginning at page 31, line 2 and ending at page 31 line 5. Please substitute the following new paragraphs to read as follows.